

Gary Airport ~~Rich~~
(The second try!)
no site #

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

Date: March 30, 1995

To: Greta J. Hawvermale, OER Thru:
From: Jim Smith, OER *Jim Smith*
Subject: Gary Regional Airport

Per your request, Rich Molini and I reviewed the Gary Regional Airport request for "Funding for Environmental Issues" August 1, 1994 letter to Mr. Curtis Wiley of Indiana Department of Commerce and associated documents to prepare recommendations as to payment for "the completed report" and proposed projects for expenditure of the \$235,000 IDEM funding promised in 1992. Our recommendations in order of **priority** follow:

- 1) The August 1, 1994 letter identifies two Phase I and one Phase II Site Assessments on approved potential expansion areas which were completed at a cost of \$123,502. Both Phase I reports were typical desk top, paper searches for environmental concern related to the areas. A single field visit (walk over) was conducted for each. The Phase II site assessment included surface soil and ground water sampling near an underground fuel tank. While we feel the costs associated with these studies is slightly inflated (see attached), the work has been approved and completed by a contractor to the Gary Regional Airport. We recommend payment for the completed reports.
- 2) **Item 2. Fuel Tank Removal and Soil Disposal** - should receive the highest priority for use of remaining funds. Anticipated costs identified at \$85,000 to \$90,000 may be inflated for the stated projects. Submitted bids for removal of a 6,000 gallon leaking underground tank ranged from \$3,500 to \$4,700 (IDEM staff estimates ranged from \$3,000 to \$5,000). Contaminated soil or liquid disposal was not included in quoted prices. A second tank, which was not identified in the Site Assessment Reports, was also to be removed. All product had been removed from this second tank but no soil or ground water samples had been taken (IDEM staff estimated cost for removal of underground storage tanks ranged from \$1,000 to \$2,000 plus soil or liquid disposal costs). An estimated 1,100 cubic yards of contaminated soil was to be removed and disposed of at an estimated cost of \$45,000. Additional data will have to be collected to justify the necessity of removing this much soil; initial sampling indicated that most contamination associated with the tank was restricted to proximity of the tank only. Ground water contamination was also found in the immediate vicinity of the leaking

tank. We recommend initial funding of \$30,000 to cover cost of underground fuel tanks removal and closure. Additional funds should be provided only as needed to cover justified costs.

- 3) **Wet Prairie Restoration** - Approximately \$50,000 was requested for further planning and implementation of restoration plan for "... two areas where restoration of the wet prairie area would particularly enhance the visual image of the airport." These two areas are identified in the Gary Regional Airport Master Plan (Phase I Report, February 1994), Airport Layout Plan, Chapter Nine, Figure 2 of 9 as "Stage I Wet Prairie Restoration Area". However, it can also be noted that in EXHIBIT 8-J in Chapter Eight of the same Master Plan the sedge meadow/wet prairie wetlands already exist in the exact spot where the airport proposes to restore these wetlands. We can not recommend that funds be provided to the airport to restore wetlands that already exist. We would recommend that funds be provided to the Gary Regional Airport to support development of a mitigation plan to compensate for the planned future impact or destruction of approximately 150 acres of wetlands on the airport property.
- 4) **Nike Site Clean Up** - A request of \$30,000 seems excessive. Lead and other contaminant levels associated with water standing in the underground silo do not seem to be of sufficient concentration to require special treatment prior to disposal. It is doubtful that pretreatment would be required to dispose of this water via the Gary Sanitary District (GSD), a charge probably would be assessed for disposal and treatment at the GSD. Testing is estimated at \$500 to \$1000. Bids submitted for tank removals above indicate that liquid disposal costs (for bulk disposal) ranged from \$12,600 (\$.42/gal) to \$19,780 (\$.62/gal. + \$285/truck [3 loads est.] + \$325 sampling).

As a former NIKE Site, does this fall under the Department of Defense program? A check with Rex Osborn, IDEM's Defense Environmental Restoration Program Coordinator, indicated that two NIKE Formerly Used Defense Sites (FUDS) are identified for the Gary Area but it is unclear if the one at the airport is included. Mr. Gary Chisholm, FUDS Project Manager, U.S. Army Corps of Engineers, Louisville, Kentucky (502/625-7010) might provide information relative to the Gary Airport Site.

We recommend that this site be funded only if (a) funds are not available through the Department of Defense's Formerly Used Defense Sites program, and (b) at documented cost.

Estimated costs for Phase I Assessment:

Research, Site Visit and Report Preparation costs

\$2,500 to \$5,000 X 2 = \$10,000 (max assumed)

Estimated costs for Phase II Assessment:

| | | |
|---|---------|----------|
| Sampling: Laboratory | Soil | \$21,160 |
| | Water | \$6,650 |
| | Borings | \$11,000 |
| | Wells | \$10,000 |
| Field Work | | \$10,000 |
| Report Preparation (assume 10 person days @ \$85/hr.) | | \$6,800 |
| Miscellaneous costs | | \$15,000 |
| Error in estimate +/- 15% | | \$12,000 |

Total estimated costs for the two Phase I and one Phase II Site Assessments with above assumptions would fall somewhere between \$70,000 and \$95,000.

THIRD REGIONAL AIRPORT - GARY CONCEPTS
REMEDATION COST ESTIMATES

ASSUMPTIONS

- o Totally clean site is impossible
Airport will accept contaminated site/
liability
- o Areas with foundry sand/slag left in
place, if not hazardous
- o Solid waste landfills must be excavated
and removed and relandfilled off-site
due to structural problems.
- o Superfund sites must be excavated,
incinerated, or solidified and residues
landfilled at a RCRA facility. Slurry walls
~~around perimeter for groundwater containment~~
- o Leaking underground storage tanks are in the
area requiring clean-up to IDEM std. of 100 ppm
total hydrocarbons
- o Soils at Tank farms/refineries are contaminated with
petroleum.
- o City of Gary's Ralston St. sludge lagoon contains
PCB wastes - 600,000 yd³ @ 20% total solids (est.)
Remediation includes sludge drying and incineration
with landfilling residues at a hazardous waste
landfill.
- o DuPont contaminated soil- assume incineration as a
hazardous waste
- o All costs are for remediation. No demolition
costs are included (except for asbestos,
underground tanks)
- o Due to land ban restrictions, remediation
involves excavation, incineration and/or
solidification with landfilling of residues at a
hazardous waste landfill.
- o Costs are for cleanup under EPA and IDEM standards
based on 1991 costs. Current property owners and
cleanup projects could be called upon to pay some
or all of the cleanup costs.

Prepared by:

HNTB

March 12, 1991

Revised March 26, 1991

12. 1/6

THIRD REGIONAL AIRPORT - GARY CONCEPTS REMEDIATION COST ESTIMATES

| SITE NAME / LOCATION | DESCRIPTION | EPA ID NO. | EST. ACRES | LIST | POLLUTANTS | REMEDICATION METHODS | EST. REMEDIATION | | ASSUMED OWNER CONTRIB |
|----------------------|-------------|------------|------------|------|------------|----------------------|------------------|------|-----------------------|
| | | | | | | | COSTS (1991) | TIME | |
| ANDERSON | | | 9 | | | | 2 | | |
| BLACK BEAUTY | | | 10 | | | | 3 | | |
| BORCI | | | 146 | | | | 1 | | |
| CALUMET | | | 2 | | | | 1 | | |
| CHEN HAWERS | | | 5 | | | | 2 | | |
| CITCO TANK BOT | | | 24 | | | | 30 | | |
| CITIES SERVICES | | | | | | 50 | — 70 | | |
| CONNER | | | — | | | | 0 | | |
| CONRAIL FLEX-FLO | | | 17 | | | | 6 | | |
| AIRPORT | | | | | | 20 acres | 10 | | |
| GENERAL DRAINAGES | | | 15 | | | | 3 | | |
| IND DISPOSAL | | | 9 | | | | 32 | | |
| LURIA | | | 6 | | | | 5 | | |
| PAOGL BEHIND | | | — | | | | 1,050 | | |
| 18 | | | 5 | | | | .5 | | |
| 75 | | | 20 | | | | 2 | | |
| Western | | | 20 | | | | 1.3 | | |

28

1,854,425,000

$$\begin{array}{r}
 162 \\
 462 \\
 \hline
 4785
 \end{array}$$

THIRD REGIONAL AIRPORT - GARY CONCEPTS REMEDICATION COST ESTIMATES

| SITE NAME / LOCATION | DESCRIPTION | EPA ID NO. | EST. ACRES | LIST | POLLUTANTS | REMEDICATION METHODS | EST. REMEDIATION | | ASSUMED OWNER CONTRIB |
|----------------------|-------------|---------------|---------------|------|------------|-------------------------|------------------|-------|-----------------------------|
| | | | | | | | COSTS (1991) | TIME | |
| M/OCO I | | | 4 | | | EX P+T | 11.2 | | |
| M/OCO II | | | 16 | | | EX P+T | 19.2 | | |
| 9th Ave | | | 17 | | | EX P+T | 22.2 | | |
| Gary Land Develop | | | 62 | | | EX P+T | 200) | 52.6 | |
| Hawmuck Dump | | | 40 | | | | 120) | | |
| Gary L&P1 | | | 60 | | | EX P+T | 240) | | |
| Poland Dump | | | 14 | | | EX P+T | 42 | | |
| Houses T. Yard | | | 11 | | | EX P+T | 12 | | |
| Black Oak L&P1 | | | 10 | | | EX P+T | 40 | 654 | |
| GARY WWTP | | | | | | | ? | | |
| RALESTON ST | | | 9 | | | | 173. | | |
| INDUSTRIAL DISP | | | 6 | | | | .1 | 173.1 | |
| CITCO | | | | | | 100 | 300 | | |
| SHELL | | | | | | | 2 100 | 2400 | |
| SAMDEKI | | | 22 | | | | 53 | | |
| GP- CANTU | | | 30 | | | | 160 | | |
| CC | | | 4.5 | | | | 9 | | |
| D.Rot | | | 240 20 | | | | 300 | | |
| AMG - VULCAN | | | 19 | | | | 6 | | |
| TUD. CUNDERS | | | 7 | | | | 7 | | |
| MID CNT COKE | | | 9 | | | | 1025 | | |
| PUREX | | | 10-25 | | | | 1050 | | |
| RUAN | | | 5 | | | | 1.3 | | |
| Site 63 | | | 8 | | | | .5 | | |

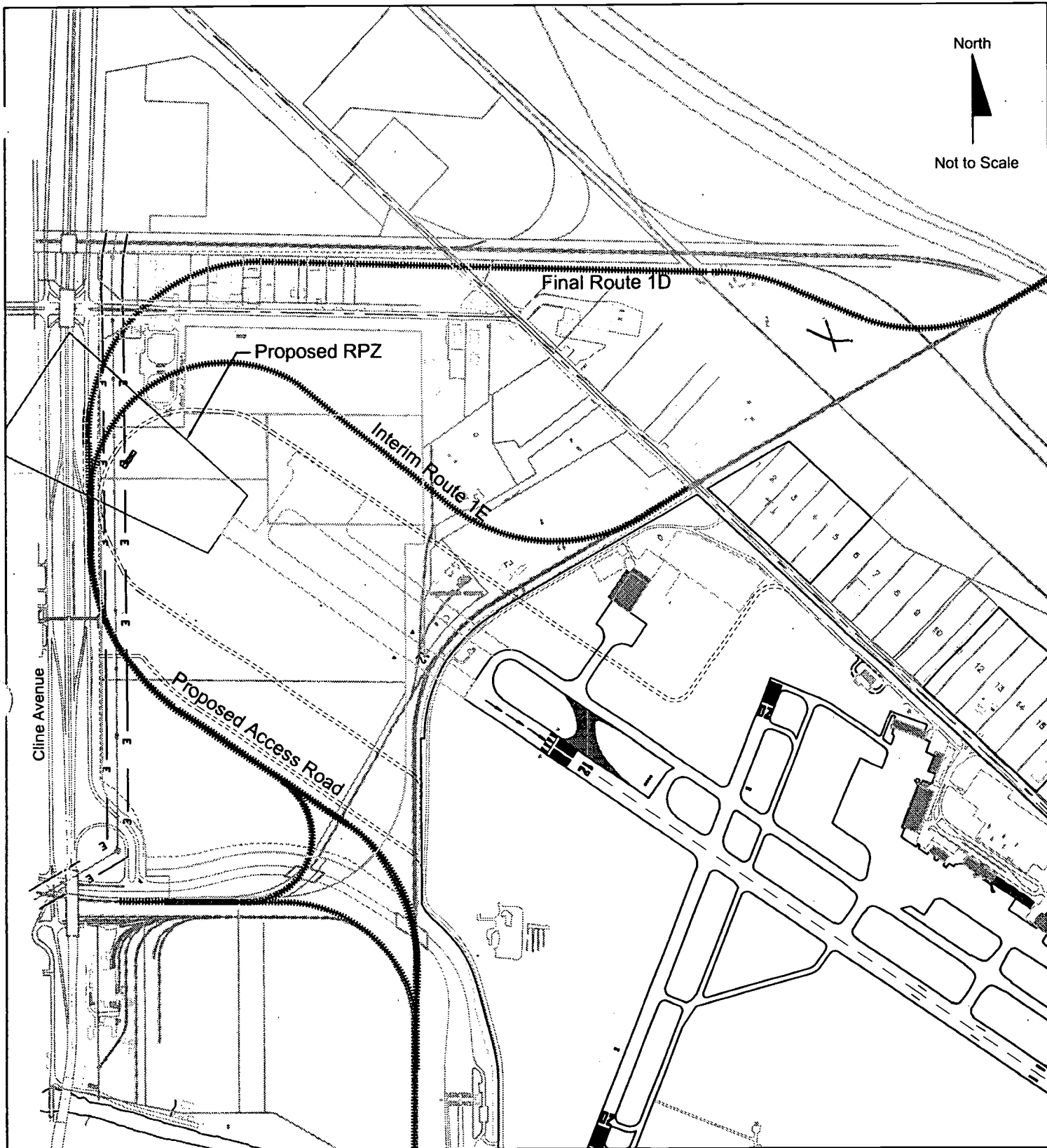


EXHIBIT 2-3
Rail Relocation Routes
1D and 1E

April 8, 2004

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INDIANA DEPARTMENT OF TRANSPORTATION

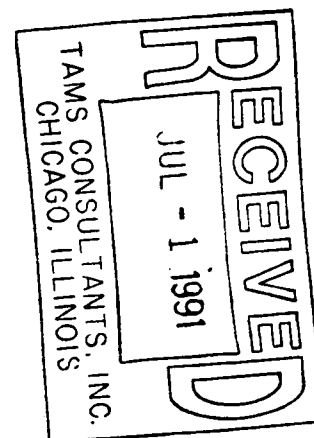
100 North Senate Avenue
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OFFICE OF THE COMMISSIONER

Room 1101
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Indianapolis, Indiana 46204-2249
317-232-5526

June 26, 1991

Mr. Rocquin L. Van Guilder
Assistant Vice-President
TAMS Consultants, Inc.
Two Illinois Center, Suite 1921
233 North Michigan Avenue
Chicago, Illinois 60610



Dear Mr. Van Guilder:

Indiana, as a sponsor of the Third Airport Study, developed the following questions and preliminary technical comments regarding TAMS Working Paper 10; Trip Generation/Distribution of Enplanements. The purpose of this letter is to gain additional insight as well as to offer specific comments with regard to the methodologies and assumptions used in the working paper. I have grouped Indiana's questions and comments into various subject areas as indicated below.

Passenger Survey

With regard to the residential survey of air travellers, Indiana found no explanation as to why trips of less than 150 miles were excluded (there is jet service from Chicago to five markets within 150 miles) and whether that might have introduced any bias into the survey results. Also, since the survey was conducted in March, there may be potential bias due to the college student population taking spring break vacations.

Indiana's questions are:

- * Why was the survey restricted to trips of more than 150 miles?
- * Is there any potential bias resulting from the survey being conducted in March as opposed to a different month of the year?

Capacity

The estimated capacities for O'Hare and Midway in Working Paper 10 vary slightly from those presented in Working Paper 10A; - Chicago Airport System Capacity with no explanation of the difference. This is relevant because the HNTB analyses used the Working Paper 10A data.

Indiana's question is:

- * Why were the capacity estimates changed between Working Paper 10A and Working Paper 10?

International Passengers

The TAMS allocation of international traffic is driven solely by capacity. O'Hare is assumed to accommodate all potential international traffic until it reaches the capacity of its international facilities. After that, all additional potential international traffic (2.4 million in 2010 and 5.9 million in 2020 according to your forecasts) is assumed to go to the new airport regardless of location.

Indiana's questions are:

- * Was there any analysis conducted of the ability of the urban airport sites, Gary and Lake Calumet, to attract international originating traffic before the year 2010?
- * Was there any analysis conducted regarding whether potential originating international traffic at the rural sites, Peotone, BiState, and Kankakee, would be sufficient to attract the necessary international service?
- * Was there any analysis conducted regarding the possible loss from the region of potential international connecting traffic?

Origin-Destination Passengers

Indiana has two initial issues that need to be addressed regarding the estimation of domestic originating passengers: (1) the selection of the travel time coefficient, and (2) the assumption of additional initial hotel room originations at the new airport site.

The distribution of passenger originations is sensitive to the travel time coefficient used in the multinomial logit model since the lower the absolute value of the travel time coefficient, the lower the impact of airport distance on passenger choice. The coefficient used in the TAMS analysis (-0.06) has a lower absolute value than those previously calculated in studies for Baltimore-Washington, San Francisco, or Central England.

In addition, the survey data from which the coefficient was estimated does not include residential passengers making trips of less than 150 miles, who may be the most time sensitive. For example, a passenger who needs to get to Milwaukee quickly enough to choose to fly is not going to want to spend a lot of time driving to the airport.

The TAMS allocation methodology adds hotel rooms to the new airport site (2000 rooms in the year 2000 and 4000 rooms in the year 2010) which in turn generate additional originations in the immediate new airport vicinity. The hotel rooms are assumed to be in the airport vicinity because of passenger activity. This creates an initial "bootstrap effect" which should perhaps be left to later iterations.

In addition, the number of assumed hotel rooms is identical for each new airport site regardless of the actual originations generated. Indiana does not support this assumption.

Indiana's questions are:

- * How much impact does the value of the travel time coefficient have on the passenger origination allocations?
- * Was there any examination of the potential effect of the exclusion of trips less than 150 miles from the survey upon the travel time coefficient?
- * What would the passenger allocations have been without the additional hotel rooms assumed at the airport sites?

Connections

Your study assumes that 50 percent of traffic at O'Hare will remain connecting. You argue that in recent years the percentage of connections at O'Hare has not fallen despite the fact that the airport is approaching capacity. This assumption may not hold in the long run because:

- * Other airports approaching capacity, such as Atlanta, have experienced reductions in the connecting percentage.
- * As capacity is reached, airlines experience higher operating costs. They will find it more economical to divert some connecting passengers through other hubs than to lose originating passengers.
- * Although the loss of connecting activity would have a negative impact on the local economy, this is unlikely to be a major consideration among the airlines.
- * Although airlines will almost certainly maintain some connecting activity at O'Hare, a moderate reduction in the connecting percentage is reasonable. It is also likely that this reduction will be dependent to some extent on the location of the new airport site.

Your summary tables (Tables 11 and 12) of connecting total passengers do not provide projections for the new airport sites under the unconstrained capacity scenario, instead stating that these numbers are "not meaningful" without allowing the reader to make that judgement.

Indiana's questions are:

- * Is there any basis for assuming that the connecting ratio at O'Hare would be 50 percent regardless of the location of the new airport?
- * Why are the "not meaningful" numbers in Tables 11, and 12 not meaningful. What are the actual values?
- * In Table 12, why is the total domestic estimated traffic at O'Hare less under the unconstrained capacity scenario than under the constrained capacity scenario?

Other Issues

Indiana would also like to clarify the portion of the working paper that references HNTB's recent report. We want to make sure that we understand your statements regarding the forecasting completed by HNTB. It is our understanding that both studies used the 90 million passenger regional forecast.

In summary, the assumptions used in the TAMS distributions of international originating and connecting passengers combine to result in a conclusion that all 90 million potential passengers can be accommodated within the region, regardless of the location of the new airport site. Given the TAMS analysis, the conclusion is that from a passenger demand standpoint, the location of the new airport is irrelevant. Indiana does not accept this, and certainly before accepting this conclusion, the methodologies and assumptions should be better documented and explained.

I look forward to hearing from you in the near future.

Sincerely,

A handwritten signature in black ink, appearing to read "Christine W. Letts". The signature is fluid and cursive, with the first name being the most prominent.

Christine W. Letts
Commissioner

cc: Kirk Brown
Robert Repel
Robert York
Lou Yates
Don Corinna

Data Requests
Waste/Contaminants
Site Selection Process
Supplemental Airport, NE-IL NW-IN

- Provide the name of the contact within each state to obtain well registration information.
- Locate solid waste and hazardous waste sites to determine if any potential properties have been or are currently involved in sampling or cleanup operations. Include State-funded or enforced cleanup projects (State sites) with the status of scoring or remediation.
- Locate sites which may have had any actions or complaints filed against them recently, which may not have been included on other listings. These listings include those resources commonly available to the public.
- Provide the name of the person to contact, or provide the information, regarding available groundwater monitoring or production well quality information for areas within the alternative study sites. Information of interest includes: groundwater elevations, flow direction, horizontal and vertical permeabilities of the different units, transmissivity/yield, and the most recent groundwater quality data.
- Provide the name of the person to contact at the local agency level (such as Health, Fire, and Water Departments) who may have knowledge concerning any possible solid/hazardous waste sites, underground storage tanks, or landfills which may have escaped inclusion in other state or regional listings.
- Provide the name of the person to contact, or provide the information, concerning the acquisition of current and historical aerial photographs (stereo pairs if available) of the alternative sites.
- Identify the existence of active sanitary landfills within 10,000 feet of the proposed study areas.
- Provide the name of the person to contact, or provide the information, concerning boring logs (overburden) for each of the study areas.

**REQUEST FOR A CLARIFICATION OF REGULATORY PHILOSOPHY REGARDING
WASTE RELATED ISSUES**

- Provide a brief description of philosophy of groundwater cleanup in industrial areas and negotiable flexibility if there is no planned use of groundwater as a drinking water source.

- Provide a description of philosophy of soils cleanup in industrial areas. For example:
 - Is isolation or containment of contaminants on-site (as opposed to treatment) an acceptable approach?
 - If contaminants are at a hazardous level is isolation still acceptable?
 - Is capping an acceptable long-term approach to management of contaminants? For example, can soils or wastes contaminated by toxic metals be consolidated from various parts of the acquisition area and managed by capping?
- What are the institutional barriers to consolidating cleanup of Federal and State Superfund sites in a single program with other waste concerns as part of airport construction?
 - Is this at all possible? If so, how might the coordination of these efforts impact the project schedule?
 - If, for instance, the Gary site were selected for airport construction is there sufficient political cooperation expected to allow such an approach with perhaps the project sponsors or another single entity assuming legal responsibility for all cleanup.

GARY AIRPORT PROJECT

This report is being prepared for HNTB Consultants and the Department of Transportation for use in estimating remediation costs for underground storage tank releases in the Northwest Indiana area being considered for major airport expansion. The area studied encompasses parts of Gary, Hammond, and East Chicago based on the following postal zip codes, 46312, 46406, 46404, and 46402.

The attached chart #1 shows the number of registered facilities in each code and is then multiplied by the percentage of that area code affected by the proposed expansion. These percentages were supplied by HNTB. There are also unregistered facilities in the area. A drive through conducted by the LUST Section's NW staff member indicates that there is approximately 22 unregistered and/or abandoned facilities in the subject area. Therefore the total number of facilities this report is based on is 106.

Several assumptions have been made in determining remediation needs.

1. The 22 abandoned and/or unregistered facilities are all assumed to need some level of remediation. Previous situations statewide support using this assumption. If a tank area is not maintained, upgraded, and properly closed there are releases.
2. Due to the high water table in the area it is assumed that more of the releases will affect the groundwater and therefore raise the associated costs.
3. Also due to the high water table and the sandy soils in the area, more sites are assumed to be elevated to the medium and high priority classes.

Based on these assumptions, the number of anticipated remediations for this area if all these facilities were closed is 75% or 80 facilities will require some clean-up.

UST closures and remediations primarily fall into 3 priority categories. Low priority remediations are associated with soils only contamination. Average costs for these clean-ups range from under \$25,000 to approximately \$60,000 based on the amount of soil affected and the remediation technology selected. An average cost of \$35,000 has been assigned to this category for the purposes of this report with 30% of the total remediations being assigned to this category. Remediation technologies commonly used include landfarming/bioremediation, soil vapor extraction, in situ bioremediation, soil venting, and landfilling. Other remediations being proposed include asphalt batching, thermal extraction, and incineration.

Medium priority clean-ups involve remediation of soils and dissolved product in the groundwater. Remediation costs range from \$50,000 to approximately \$100,000 with an average of \$75,000 used for this report. About 45% of the total number of anticipated clean-ups have been assigned to this category. The low priority soil remediation technologies also apply here along with pump and treat with a discharge or reinjection, or bioremediation for the groundwater clean-up.

High priority clean-ups involve free product, affect a drinking water supply, and/or involve explosive vapors in sewers, homes, or businesses. These are the longer term clean-ups with costs always exceeding \$100,000 and range upward to approximately \$500,000. An average cost of \$225,000 has been assumed for this report. The higher costs are associated with the primarily sand and sand mix soils in the area which allow

free product to reach the water table quicker and to spread faster. Of the total anticipated clean-ups, 25% have been assigned to this category. High priority remediations require soil clean-up, free product removal, dissolved product treatment, and often venting of sewer systems or homes with utility lines sometimes needing replacement.

FACILITIES WITHIN THE PROPOSED EXPANSION AREA

| Zip Code | # of Registered Facilities | | % of Zip Code in Study Area | | Total |
|--|-------------------------------|---|--------------------------------|---|-----------|
| 46406 | 39 | X | 100% | = | 39 |
| 46404 | 20 | X | 50% | = | 10 |
| 46312 | 64 | X | 50% | = | 32 |
| 46402 | 30 | X | 10% | = | 3 |
| | | | | | <hr/> 84 |
| Approximate # of Unregistered Facilities = | | | | | 22 |
| | | | | | <hr/> 106 |

REMEDATION COST ESTIMATE

Low Priority Sites

| | | | | |
|-------------------------|---|--------------------|---|--------------------|
| Total Remediation Sites | | % in this Category | | Total Low Sites |
| 80 | X | 30% | = | 24 |
| # of Low Sites | | Average Cost | | Total \$ Low Sites |
| 24 | X | \$35,000 | = | \$840,000 |

Medium Priority Sites

| | | | | |
|-------------------------|---|--------------------|---|-----------------------|
| Total Remediation Sites | | % in this Category | | Total Medium Sites |
| 80 | X | 45% | = | 36 |
| # of Medium Sites | | Average Cost | | Total \$ Medium Sites |
| 36 | X | \$75,000 | = | \$2,700,000 |

High Priority Sites

| | | | | |
|-------------------------|---|--------------------|---|---------------------|
| Total Remediation Sites | | % in this Category | | Total High Sites |
| 80 | X | 25% | = | 20 |
| # of High Sites | | Average Cost | | Total \$ High Sites |
| 20 | X | \$225,000 | = | \$4,500,000 |

TOTAL = \$8,040,000 FOR REMEDIATION OF AN ANTICIPATED 80 SITES

THIRD REGIONAL AIRPORT - GARY CONCEPTS
IDEM REMEDIATION COST ESTIMATES
MEETING AGENDA
APRIL 23, 1991

- I. Airport Project Overview
- II. Remediation Cost Estimate Task
- III. List of Waste Sites
 - (a) IDEM Review List
 - (b) Remedial Action Plan - NW Indiana
 - (c) Congressman Visclosky Letter
 - (d) CERCLIS List-Lake Co.
 - (e) Other
- IV. Waste Site Types
 - (a) Superfund Sites
 - (b) RCRA Sites
 - (c) CERCLIS Sites
 - (d) Solid Waste Sites
 - (e) Petroleum Sites (Tank Farms - UST)
 - (f) Other Sites (Treatment Plants, Lagoons, Dredgings)
- V. Remediation Cost Assumptions
- VI. Format Sheet
- VII. Schedule

Clark: Pines
- Nature Preserved
(Dong: Cartage)

NR contact: John Beane

Prepared by:

HNTB
April 23, 1991

/blc



225 North

New Jersey Street

Indianapolis, Indiana

46204-2135

(317) 636-4682

May 2, 1991

May 6 9 36 AM '91

OFFICE OF SOLID
AND HAZARDOUS
WASTE MGMT
DEM

Ms. Anne Black, Chief
Underground Storage Tank Section
Office of Environmental Management
Indiana Department of Environmental Management
5500 West Bradbury Avenue
Indianapolis, IN 46241

Re: Third Regional Airport - Gary
HNTB Job No. 14520-11-01

Dear Anne:

Please find enclosed the Gary area zip code map for use in quantifying the number of underground storage tanks (UST) in the vicinity of the new regional airport. As discussed at our April 17, 1991 meeting, a UST count is needed to determine a probable cost to remediate underground storage tanks. We understand that IDEM has a computerized data bank of reported UST locations which can be searched by zip code. You indicated that the Gary area has an incomplete list due to nonreporting by owners.

In order to estimate the actual number of tanks, we would suggest development of a average number of tanks per area for cities similar to Gary. The proposed Gary acreage could be multiplied by the average number of USTs per acre to estimate the total number of USTs in the area.

We understand that IDEM prioritizes UST site work based on impact potential with sites categorized as low, medium, or high priority. Low priority sites involve tank removal with costs less than \$25,000. Medium priority sites exhibit soil contamination with petroleum and may cost \$60,000 to \$70,000 for closure. High priority sites involve groundwater contamination or massive soil contamination with cleanup costs typically in excess of \$150,000 per site. Based on historical cleanup costs that IDEM is familiar with, please estimate the expected percentage of low, medium, and high priority sites and the estimated closure costs for the total number of UST sites determined previously.

Finally, several tank farms and an oil refinery are located in the project area. It is highly likely that these facilities, due to their age and nature of the industry, have contaminated the soil and possibly the groundwater with petroleum. A remediation estimate is needed for soil and groundwater cleanup with costs based on historical UST data for soil disposal and groundwater cleanup.

Directors: Charles T. Himmelfarb, PE, Dallas, Texas; Sergei PE, John L. Cotton, PE, Robert H. Green, PE, Donald A. Dubois, PE, James L. Tekotte, Jr., PE, Henry C. Schatz, PE, Gary C. Chaudhary, AIA, Gordon H. Slattery, Jr., PE, Harvey K. Hammond, Jr., PE, Stephen J. Gaudin, PE, James W. Ward, Jr., PE, Richard D. Beckman, PE, Richard L. Egan, AIA, Douglas C. Brunsdon, PE, Brahm J. Hartman, PE.

Associates: Sarah E. Lando, CPA, Roberts, W. Schmitt, PE, Henry D. Hertzberg, PE, David L. Johnson, PE, Stanley J. Mudd, PE, William J. Jurek, PE, Brian J. Lamm, PE, Johnnie G. Butler, PE, Thomas M. Gurneys, PE, Michael P. Ingelsrud, PE, Thomas L. Fourn, PE, Stephen H. Dantz, PE, Brian A. Jennings, PE, Lewis H. Miller, AIA, Douglas D. Meyer, PE, Joel J. Mohr, PE, David F. Buckner, PE, David P. Smith, PE, Thomas L. Williams, AIA, Dennis L. Gaudin, PE, John L. Skopke, PE, Richard P. Roth, PE, Steven M. Hogg, AIA, Robert A. Luck, PE, Gloria D. Szabarsky, PE, Benjamin A. Wenden, PE, Douglas S. Acosta, PE, James D. Dierbach, PE, Douglas L. Pflough, Jr., PE, Richard M. Simon, PE, Douglas A. David, AIA, Raymond J. McCabe, PE, Thomas A. Skonieczny, PE, David A. Zimmels, PE, Christopher D. Howard, AIA, AIAA, Richard W. Cook, AIA, James T. Kraso, AIA, Terry E. Miller, AIA, Douglas C. Ward, PE, Margaret C. Miller, PE, Robert L. Watson, AIA.

Office: Alexandria, VA; Arlington, VA; Fairfax County, VA; Herndon, VA; Leesburg, VA; Loudoun County, VA; Manassas, VA; Manassas Park, VA; McLean, VA; Potomac, MD; Reston, VA; Springfield, VA; Tyngsboro, MA; Irvine, CA; Kansas City, MO; Longview, KS; Louisville, KY; Louisville, VA; Miami, FL; Milwaukee, WI; Minneapolis, MN; New York, NY; Oklahoma City, OK; Omaha, NE; Overland Park, KS; Philadelphia, PA; Phoenix, AZ; Raleigh, NC; San Antonio, TX; Tampa, FL; Tulsa, OK; Washington, DC.

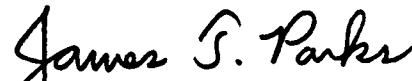
Ms. Anne Black
Indianapolis, Indiana
May 2, 1991
Page 2

A followup meeting is tentatively scheduled for Friday, May 17, 1991, at IDEM to review remediation costs, to allocate costs to responsible parties, to review possible "economies of scale" for area wide cleanup, and to project timetables for site remediation efforts.

Thank you for your assistance with the underground storage tank and petroleum industry remediation estimates. Should you have any questions or comments, please feel free to call.

Very truly yours,

HOWARD NEEDLES TAMMEN & BERGENDOFF



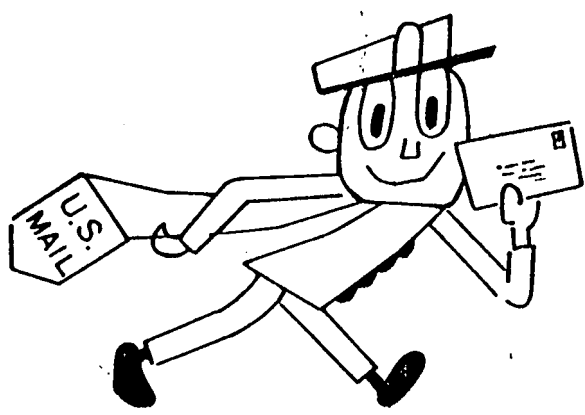
James T. Parks, P.E.
Project Engineer

JTP/blc

Enclosure

cc: ~~Harry Atkinson, IDEM~~
John W. Myers, HNTB
Bryan Nicol, INDOT

ZIP



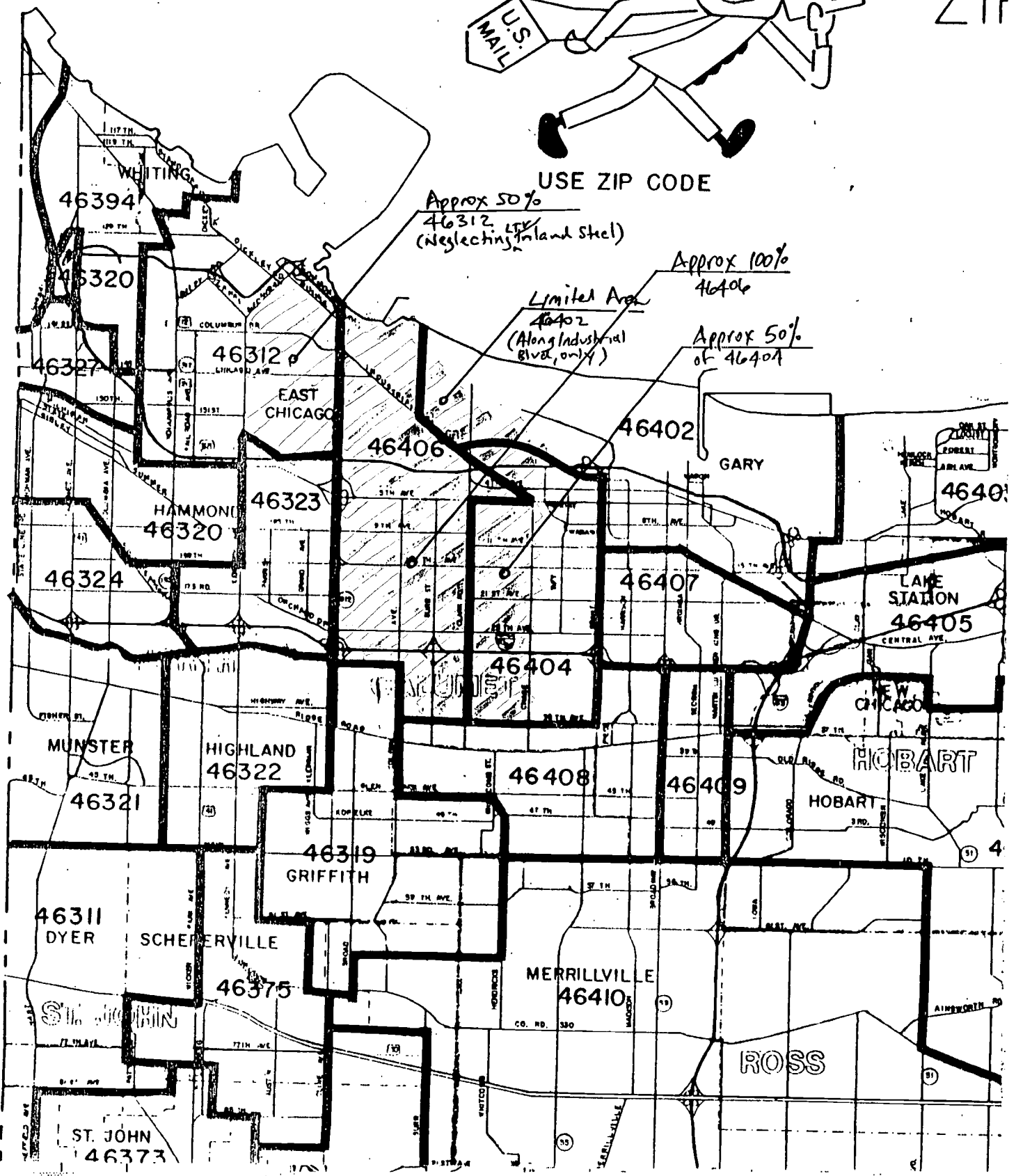
USE ZIP CODE

Approx 50%
46312
(Neglecting Inland Steel)

Approx 100%
46406

Limited Area
46402
(Along Industrial Blvd, only)

Approx 50%
of 46404



DATE 5-16-85

SITE ID

¹¹
Vulcan Materials Company
TDD # 8307-04B
DOOS444 23503

TIME 1:00 p.m.

SITE Vulcan Materials Company ²⁵⁻³⁵
_{for USS Lead}

CONTACT Bill Baldwin PHONE (619) 886-3770

Engineer

Gaug-Hobart Water Company

SUBJECT In response to a letter dated May 10, 1985

To: Mr Baldwin, Engineer Gaug-Hobart Water Company
From: Ruth Ann Jacquette, Environmental Scientist, E&E, Inc

of those addresses listed in Appendix A,
the following currently obtain drinking
water from the Gaug-Hobart Water Company

| | | | |
|-------------|------------------------------|-------------|-----------------------------------|
| <u>7105</u> | <u>5th Avenue</u> | <u>2921</u> | <u>6th Avenue</u> |
| <u>5630</u> | <u>9th Avenue</u> | <u>2929</u> | <u>6th Avenue</u> |
| <u>5824</u> | <u>9th Avenue</u> | <u>2937</u> | <u>6th Avenue</u> |
| <u>5718</u> | <u>9th Avenue</u> | <u>2945</u> | <u>6th Avenue</u> |
| <u>5830</u> | <u>9th Avenue</u> | <u>2961</u> | <u>6th Avenue</u> |
| <u>5838</u> | <u>9th Avenue</u> | <u>2973</u> | <u>6th Avenue</u> |
| <u>6000</u> | <u>9th Avenue</u> | <u>1718</u> | <u>Williams Street</u> |
| <u>6014</u> | <u>9th Avenue</u> | <u>1370</u> | <u>Baker Street</u> |
| <u>538</u> | <u>Janey Street</u> | <u>1140</u> | <u>Blaine Street</u> |
| <u>548</u> | <u>Janey Street</u> | <u>1520</u> | <u>Blaine Street</u> |
| <u>556</u> | <u>Janey Street</u> | <u>7306</u> | <u>15th Ave Street</u> |
| <u>564</u> | <u>Janey Street</u> | | |

Ruth Ann Jacquette (F)
Date 5-16-85

For those remaining addresses,
hook up to the Gang-Hobart Water System
would be an exorbitant cost to be
placed on a home owner. Many
main water lines may be near
these homes but the cost of an
extension pipe, plus a hook-up charge
would average \$500.00.

APPENDIX A - LIST OF ADDRESSES AND BUSINESSES

I.

7100 Chicago Avenue - Steel Haulers, Inc.

receive Sany-Hobart water

7100 Industrial Highway - Thatcher Engineering includes four

subsidiaries in same complex

*well used for washing, not consumed
finished in bedrock*

- Bedrock not finished*
1. Thatcher, Inc. (Counted as five single units).
 2. Blitz Coupler
 3. Slurry Systems, Inc.
 4. Thatcher Marine

do not use well, drink Bottled water

II.

7500 Chicago Avenue - Ligon Corp.

do not use well, drink Bottled water

Clark Road

145

156

W. Birch

144

145

150

192

✓ Hobart Street

325-329 (Six residential units were assumed).

347

349

367-371

5th Avenue

Served by
Gary Hobart

- 7105

7121

unmarked house in 7300 block

✓ 157 Dewey Street

Lee Street

Fairbanks Street

149 150

521

153 152

559

157 158

9th Avenue

5630

5824

5718 Sanders Temple, Church of God in Christ

5830

5838

6000

6014

6701

6719 M.S. Compass (truck terminal)

Served
By
Gary Hobart

III.

Taney Street

538 All are duplexes with two residences.

544 Structures look new.

548 Total of 12 residential units.

556

560

564

Served by Gary Hobart
and are outside
of the Volcan materials
Radios

6th Avenue2921

2929

2937

2945

2961

2973

1508 Waite Street

1718 Williams Street - Served by Gary Hobart

Dallas Street

1104 1119

1150 1125

1143 2 unaddressed homes

1146

1160

1159

7401 9th Avenue

Blaine Street

1140 R. J. Connor Contractors

1520 General Drainage (Counted as three units)

Independent Waste Systems

MMT - Management Marketing Team, Inc.

Served by
Gary Hobart15th Avenue

5829 Canaan Baptist Church

unmarked residence

14 ✓ 6700 D & B Motors - use bottled water, no well usage.

7306 Indiana State Highway Commission - maintenance garage -

Served by
Gary Hobart

7336 Enterprise Truck Line, Inc.

7413 AMS - Associated Mechanical Service, Inc.

7700 Matz American Plating

20th Avenue

7260 Carl Anderson residence

bedrock

7264

7266

7268

Cline Avenue

1601 Hessville Cable and Sling - use bottled water, no well usage.
1967

2009 Brunswick General Baptist Church

2025

Burr Street

too far

1595 1827 New, single family homes

1725 1831

1743

1745

Ralston Street

Hovey Place

too far

1740 1912 1925 All are single family residences.

1742 1924 1949

1746 1960 1973

1760 1972 2001

1790 2012 2019

1800 2024 2037

2036 2061

2048 2083

2060 2091

